

Well Construction

Frank's Tubular Running Service (TRS) - Completions Technologies

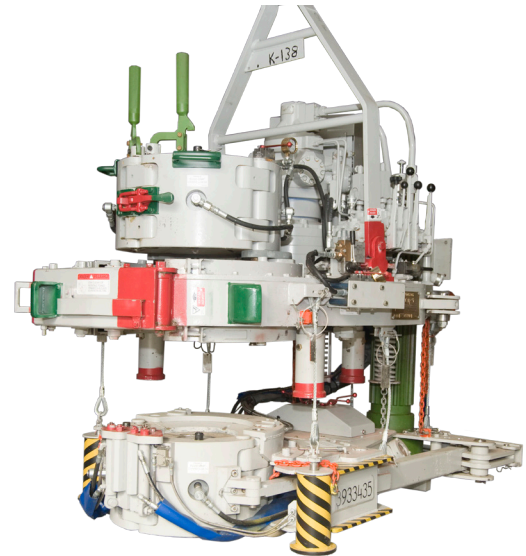
FLUID GRIP® System

For years, running expensive, corrosion-resistant, alloy tubulars without causing damaging die marks was a problem. Conventional gripping systems with metal dies create damaging indentations, which reduce wall thickness and create stress concentrations, and accelerate corrosion.

Tube body failures frequently occur in these areas. To solve these problems, Expro developed the FLUID GRIP® system in 1989. While others may offer low-marking systems, the FLUID GRIP® tong offers a truly non-marking and field-proven solution.

Features and benefits

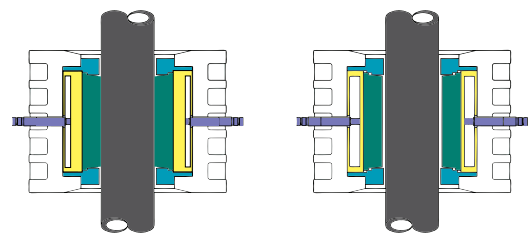
- The FLUID GRIP® System is a proprietary non-metallic and truly non-marking gripping system for making up CRA tubulars
- Gripping system enables 360° of contact around the tube body, conforming to the individual tube shape, thereby reducing stress, distortion, and galling
- Die penetration marks are completely eliminated
- No work hardening of material
- Built-in safeguards prevent pressurization of the system, unless the FLUID GRIP® housing is properly closed and latched
- Complementary Expro equipment includes the Collar Load Support (CLS™) handling systems for a completely non-marking tubular running and handling system



Specifications

Housing size (in.)	Torque capability ¹
5 3/4	20,000 ft-lbs
8 3/4	30,000 ft-lbs
12	70,000 ft-lbs

1. Factors affecting total torque capability include, but are not limited to: pipe diameter being gripped, energizing pressure used during operation, pipe condition, and condition of friction media applied to ID of gripper bushing



Grippers released

Grippers energized

- Size specific bushings
- Expandable gripper
- Hydraulic pressure port